

1. A system to perform a light show, wherein LED modules are displaying related light beams having defined properties, wherein said properties have been defined prior to performing said light show, is comprising:

a circuit comprising:

an interface to input information;

a memory to store the information about the properties of said beams to be displayed;

a sequencer to control one or more LED drivers;

a LED driver unit comprising a driver for each color of said LED modules able to control the intensity of light where one driver for each LED is used; and

an electrical connection to said LED modules; and

an arrangement of one or more LEDs modules.

2. The system of claim 1 wherein the parameters defining said properties of said light beams are downloaded via said interface to input information and stored in said memory.
3. The system of claim 1 wherein said arrangement of one or more LED modules comprises three LED modules.
4. The system of claim 1 wherein said arrangement of one or more LED modules comprises more than one LED each.

5. The system of claim 4 wherein said arrangement of one or more LED modules comprises three LEDs each.
6. The system of claim 5 wherein said three LEDs emit each light of a different color wherein said colors are primary colors of a color space.
7. The system of claim 6 wherein said three LEDs emit red, green and blue light (RGB).
8. The system of claim 1 wherein said LED drivers are PWM LED drivers.
9. The system of claim 8 wherein said PWM drivers are 4-bit drivers.
10. The system of claim 9 wherein 4096 different colors can be displayed.
11. The system of claim 1 wherein said LED drivers are current controlled drivers.
12. The system of claim 1 wherein said properties of said light beams comprise different defined brightness for each LED..
13. The system of claim 1 wherein said properties of said light beams comprise different defined flashing intervals for each LED.

- 14.** The system of claim 1 wherein said properties of said light beams comprise different ON/OFF intervals, different colors, different brightness, and a flashing interval for each LED.
- 15.** The system of claim 1 wherein said LED driver unit is activating the lights in defined time intervals.
- 16.** The system of claim 1 wherein said LED driver unit is controlling the transition between different colors of a LED module using a “flash” mode at turn on point of time wherein said LED is turned on initially to its maximum brightness followed quickly by the set brightness.
- 17.** The system of claim 1 wherein said LED driver unit is controlling the transition between different colors of a LED module using a fading interval.
- 18.** The system of claim 17 wherein different options are possible to define said fading interval.
- 19.** The system of claim 18 wherein said options to define a fading interval include the options “No Fade”, “Slow Fade”, “Linear Fade”, “Fast Fade”.
- 20.** The system of claim 19 wherein only a few of said options are being used.

- 21.** The system of claim **1** wherein said circuit is realized in an IC.
- 22.** The system of claim **1** wherein said circuit is realized in an ASIC.
- 23.** The system of claim **1** wherein said LEDs are connected to said circuit via output pins.
- 24.** The system of claim **23** wherein said output pins are arranged and controlled by a multiplexer arrangement.
- 25.** The system of claim **24** wherein nine output pins are arranged and controlled by a multiplexer arrangement.
- 26.** The system of claim **1** wherein said properties of said light beams comprise a light pattern over a multitude of LED modules.
- 27.** The system of claim **1** wherein said properties of said light beams comprise a light intensity setting.
- 28.** The system of claim **27** wherein said light intensity setting is defined for each LED individually.
- 29.** The system of claim **1** wherein said properties of said light beams comprise a defined sequencing of said LEDs.

30. A system for visual, electronic communication, highlighting information/events, wherein LED modules are displaying related light signals having defined properties representing said different information/events, is comprising:

a circuit comprising:

an interface to input information;

a memory to store the information about the properties of said signals to be displayed;

a sequencer to control one or more LED drivers;

a LED driver unit comprising a driver for each color of LED able to control the intensity of light where one driver for each LED is used;

and

an electrical connection to said LED modules; and

an arrangement of one or more LEDs modules.

31. The system of claim **30** wherein the parameters defining said properties of said light signals are downloaded via said interface to input information and stored in said memory.

32. The system of claim **30** wherein said arrangement of one or more LED modules comprises three LED modules.

33. The system of claim **30** wherein said arrangement of one or more LED modules comprises more than one LED each.

- 34.** The system of claim **33** wherein said arrangement of one or more LED modules comprises three LEDs each.
- 35.** The system of claim **34** wherein said three LEDs emit each light of a different color wherein said colors are primary colors of a color space.
- 36.** The system of claim **35** wherein said three LEDs emit red, green and blue light (RGB).
- 37.** The system of claim **30** wherein said LED drivers are PWM LED drivers.
- 38.** The system of claim **37** wherein said PWM drivers are 4-bit drivers.
- 39.** The system of claim **38** wherein 4096 different colors can be displayed.
- 40.** The system of claim **30** wherein said LED drivers are current controlled drivers.
- 41.** The system of claim **30** wherein said related signals representing said different information/events are displayed using lights having different brightness.
- 42.** The system of claim **30** wherein said related signals representing said different information/events are displayed using flashing lights.

- 43.** The system of claim **30** wherein defined categories of information are assigned to specific locations of LED modules.
- 44.** The system of claim **30** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval.
- 45.** The system of claim **30** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval, different colors, different brightness, a flashing interval, an assignment to specific positions, and a related ON/OFF interval.
- 46.** The system of claim **30** wherein said LED driver unit is activating the lights in defined time intervals.
- 47.** The system of claim **30** wherein said LED driver unit is controlling the transition between different colors of a LED module using a “flash” mode at turn on point of time wherein said LED is turned on initially to its maximum brightness followed quickly by the set brightness.
- 48.** The system of claim **30** wherein said LED driver unit is controlling the transition between different colors of a LED module using a fading interval.
- 49.** The system of claim **48** wherein different options are possible to define said fading interval.

50. The system of claim **49** wherein said options to define a fading interval include the options “No Fade”, “Slow Fade”, “Linear Fade”, “Fast Fade”.

51. The system of claim **50** wherein only a few of said options are being used.

52. The system of claim **30** wherein said circuit is realized in an IC.

53. The system of claim **30** wherein said circuit is realized in an ASIC.

54. The system of claim **30** wherein said LEDs are connected to said circuit via output pins.

55. The system of claim **54** wherein said output pins are arranged and controlled by a multiplexer arrangement.

56. The system of claim **55** wherein nine output pins are arranged and controlled by a multiplexer arrangement.

57. The system of claim **30** wherein said properties of said light signals to be displayed comprise a light pattern over a multitude of LED modules.

58. The system of claim **30** wherein said properties of said signals to be displayed comprise a light intensity setting

59. The system of claim **58** wherein said properties of said signals to be displayed comprise a light intensity setting for each LED individually.

60. The system of claim **30** wherein said properties of said signals to be displayed comprise a defined sequencing of said LEDs.

61. A phone system highlighting information/events, wherein LED modules are displaying related signals representing said different information/events, is comprising:

a circuit comprising:

an interface to input of information;

a memory to store the information about the properties of said signals to be displayed;

a sequencer to control one or more LED drivers;

a LED driver unit comprising a driver for each color of LED able to control the intensity of light where one driver for each LED is used;

and

an electrical connection to said LED modules; and

an arrangement of one or more LED modules.

62. The system of claim **61** wherein said LED modules are located on a prominent location of said phone system.

- 63.** The system of claim **61** wherein said LED modules are located on the front side of said phone system.
- 64.** The system of claim **61** wherein said LED modules are located on the sides of said phone system.
- 65.** The system of claim **61** wherein said phone system is a mobile phone.
- 66.** The system of claim **65** wherein said LED modules are located on the backside of said mobile phone.
- 67.** The system of claim **61** wherein said phone comprises composer software to define the parameters of said sequencer and to download said parameters to said memory.
- 68.** The system of claim **61** wherein the parameters of said sequencer are downloaded from a PC.
- 69.** The system of claim **61** wherein the parameters of said sequencer are downloaded from the Internet.
- 70.** The system of claim **61** wherein said arrangement of one or more LED modules comprises three LED modules.

- 71.** The system of claim **61** wherein said arrangement of one or more LED modules comprises more than one LED each.
- 72.** The system of claim **71** wherein said arrangement of one or more LED modules comprises three LEDs each.
- 73.** The system of claim **72** wherein said three LEDs emit each a light of a different color wherein said colors are primary colors of a color space.
- 74.** The system of claim **73** wherein said three LEDs emit red, green and blue light (RGB).
- 75.** The system of claim **61** wherein said LED drivers are PWM LED drivers.
- 76.** The system of claim **75** wherein said PWM drivers are 4-bit drivers.
- 77.** The system of claim **76** wherein 4096 different colors can be displayed.
- 78.** The system of claim **61** wherein said LED drivers are current controlled drivers
- 79.** The system of claim **61** wherein said related signals representing said different information/events are displayed using lights having different brightness.

- 80.** The system of claim **61** wherein said related signals representing said different information/events are displayed using flashing lights.
- 81.** The system of claim **61** wherein defined categories of information are assigned to specific locations of LED modules.
- 82.** The system of claim **61** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval.
- 83.** The system of claim **61** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval, different colors, different brightness, a flashing interval, an assignment to specific positions, and a related ON/OFF interval.
- 84.** The system of claim **61** wherein said LED driver unit is activating the lights in defined time intervals.
- 85.** The system of claim **61** wherein said LED driver unit is controlling the transition between different colors of a LED module using a “flash” mode at turn on point of time wherein said LED is turned on initially to its maximum brightness followed quickly by the set brightness.
- 86.** The system of claim **61** wherein said LED driver unit is controlling the transition between different colors of a LED module using a fading interval.

- 87.** The system of claim **86** wherein different options are possible to define said fading interval.
- 88.** The system of claim **87** wherein said options to define a fading interval include the options "No Fade", "Slow Fade", "Linear Fade", "Fast Fade".
- 89.** The system of claim **88** wherein only a few of said options are being used.
- 90.** The system of claim **61** wherein said circuit is realized in an IC.
- 91.** The system of claim **61** wherein said circuit is realized in an ASIC.
- 92.** The system of claim **61** wherein said LEDs are connected to said circuit via output pins.
- 93.** The system of claim **92** wherein said output pins are arranged and controlled by a multiplexer arrangement.
- 94.** The system of claim **93** wherein nine output pins are arranged and controlled by a multiplexer arrangement.
- 95.** The system of claim **61** wherein said properties of said light signals to be displayed comprise a light pattern over a multitude of LED modules.

96. The system of claim **61** wherein said properties of said signals to be displayed comprise a light intensity setting.

97. The system of claim **96** wherein said properties of said signals to be displayed comprise a light intensity setting for each LED individually.

98. The system of claim **61** wherein said properties of said signals to be displayed comprise a defined sequencing of said LEDs.

99. A method to establish visual, electronic communication, highlighting information/events, wherein LED modules are displaying related light signals having defined properties representing said different information/events comprising:

- providing a circuit comprising an interface, a memory, a sequencer, a LED driver unit connected to LEDs, and one or more LED modules, comprising more than one LED each;
- determine the information to be visually highlighted;
- define the kind of highlighting of the information selected above;
- compose the sequencer steps according to the definitions of the two steps above;
- if said composing software is built into the phone store the sequences in said memory;
- otherwise download sequences and store them in said memory;; and

ready for operation.

- 100.** The method of claim **99** wherein said related signals representing said different information/events are displayed using lights having different colors.
- 101.** The method of claim **100** wherein 4096 different colors are used.
- 102.** The method of claim **99** wherein said related signals representing said different information/events are displayed using lights having different brightness.
- 103.** The method of claim **99** wherein said related signals representing said different information/events are displayed using flashing lights.
- 104.** The method of claim **99** wherein said related signals representing said different information/events are displayed using LED modules assigned to specific positions.
- 105.** The method of claim **99** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval.
- 106.** The method of claim **99** wherein said related signals representing said different information/events are displayed using lights having a related ON/OFF interval, different colors, different brightness, a flashing interval, an assignment to specific positions, and a related ON/OFF interval.

107. The method of claim **106** wherein said LED driver unit is controlling the transition between different colors of a LED module using a “flash” mode at turn on point of time wherein said LED is turned on initially to its maximum brightness followed quickly by the set brightness.